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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 Of 2

COMPLETE IF KNOWN

Applicant Number	09/751,423
Filing Date	December 29, 2000
First Named Inventor	Robert A. Morgan
Art Unit	2814
Examiner Name	Douglas A. Willie
Attorney Docket Number	H16 26549 US

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
Daw		US 5,034,958		07-23-1991	Kwon et al.	
		US 5,258,316	A	11-02-1993	Ackley et al.	
		US 6,026,111	A	02-15-2000	Jiang et al.	
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FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				
		EP	0 712 182	A2	05-15-1996	Sharp Kabushiki Kaisha		
		FR	2 768 566	A1	03-19-1999	France Telecom Society Anonymo		
		WO	99/031735	A1	06-24-1999	Honeywell Inc.		
		WO	00/045483	A1	08-03-2000	University of Sheffield		

Examiner Signature	<i>Douglas A. Willie</i>	Date Considered	1 dec 03
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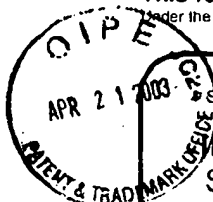
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Sheet	2	Of	2
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Attorney Docket Number	H16 26549 US

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

[illegible]

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FORM PTO-1449	Atty. Docket No.: 1100.1114101 (H16-26549)	Serial No.: 09/751,423
<p>LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT</p> <p><i>OTPE</i> AUG 19 2003 PATENT & TRADEMARK OFFICE</p>	Applicant: Robert A. Morgan et al.	
	Filing Date	Group Art:
	December 29, 2000	2872

o <i>R. Morgan</i>	BB	Choquette et al., "Lithographically-Defined Gain Apertures Within Selectively Oxidized VCSELs", paper CtuL6, Conference on Lasers and Electro-Optics, San Francisco, California (2000).
.	BC	Oh, T. H. et al., "Single-Mode Operation in Antiguided Vertical-Cavity Surface-Emitting Laser Using a Low-Temperature Grown AlGaAs Dielectric Aperture", <u>IEEE Photon. Technol. Lett.</u> , 10(8), 1064-1066 (1998).
o	BD	"Surface-Emitting Microlasers for Photonic Switching and Interchip Connections", <u>Optical Engineering</u> , 29, pp. 210-214, March 1990.
	BE	G. Shtengel et al., "High-Speed Vertical-Cavity Surface-Emitting Lasers", <u>Photon. Tech. Lett.</u> , Vol. 5, No. 12, pp. 1359-1361 (December 1993).

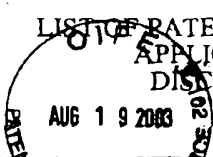
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R. Morgan

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		Filing Date	Group Art:
		December 29, 2000	2872

U.S. PATENT DOCUMENTS

Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
AA	4,317,085	02/23/1982	Brunham et al.	372	50	
AB	4,466,694	08/21/1984	MacDonald	385	37	
AC	4,660,207	04/21/1987	Svilans	372	45	
AD	4,784,722	11/15/1988	Liau et al.	156	649	
AE	4,885,592	12/05/1989	Kofol et al.	343	753	
AF	4,901,327	02/13/1990	Bradley	372	45	
AG	4,943,970	07/24/1990	Bradley	372	45	
AH	4,956,844	09/11/1990	Goodhue et al.	372	44	
AI	5,031,187	07/09/1991	Orenstein et al.	372	50	
AJ	5,052,016	09/24/1991	Mahbobzadeh	372	96	
AK	5,056,098	10/08/1991	Anthony et al.	372	45	
AL	5,062,115	10/29/1991	Thornton	372	50	
AM	5,068,869	11/26/1991	Wang et al.	372	45	
AN	5,115,442	05/19/1992	Lee et al.	372	45	
AO	5,140,605	08/18/1992	Paoli et al.	372	50	
AP	5,158,908	10/27/1992	Blonder et al.	437	129	
AQ	5,216,263	06/01/1993	Paoli	257	88	
AR	5,216,680	06/01/1993	Magnusson et al.	372	20	
AS	5,237,581	08/17/1993	Asada et al.	372	45	
AT	5,245,622	09/14/1993	Jewell et al.	372	45	
AU	5,258,990	11/02/1993	Olbright et al.	372	46	
AV	5,285,466	02/08/1994	Tabatabaie	372	92	
AW	5,293,392	03/08/1994	Shieh et al.	372	45	
AX	5,317,170	05/31/1994	Paoli	257	88	
AY	5,317,587	05/31/1994	Ackley et al.	372	45	

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1100.1114101 (H16-26549)Serial No.:
09/751,423

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Applicant: Robert A. Morgan et al.

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Group Art:

December 29, 2000

2872

Examiner Initial		Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
Jewell	AZ	5,325,386	06/28/1994	Jewell et al.	372	50	
	BA	5,331,654	07/19/1994	Jewell et al.	372	45	
	BB	5,337,074	08/09/1994	Thornton	346	107R	
	BC	5,349,599	09/20/1994	Larkins	372	50	
	BD	5,351,256	09/27/1994	Schneider et al.	372	45	
	BE	5,359,447	10/25/1994	Hahn et al.	359	154	
	BF	5,359,618	10/25/1994	Lebby et al.	372	45	
	BG	5,363,397	11/08/1994	Collins et al.	372	92	
	BH	5,373,520	12/13/1994	Shoji et al.	372	45	
	BI	5,404,373	04/04/1995	Cheng	372	50	
	BJ	5,416,044	05/16/1995	Chino et al.	437	129	
	BK	5,428,634	06/27/1995	Bryan et al.	372	45	
	BL	5,446,754	08/29/1995	Jewell et al.	372	50	
	BM	5,475,701	12/12/1995	Hibbs-Brenner	372	50	
	BN	5,513,202	04/30/1996	Kobayashi et al.	372	96	
	BO	5,530,715	06/25/1996	Shieh et al.	372	96	
	BP	5,555,255	09/10/1996	Kock et al.	372	96	
	BQ	5,557,626	09/17/1996	Grodinski et al.	372	45	
	BR	5,561,683	10/01/1996	Kwon	372	96	
	BS	5,568,499	10/22/1996	Lear	372	45	
BT	5,598,300	01/28/1997	Magnusson et al.	359	566		
BU	5,606,572	02/25/1997	Swirhun et al.	372	96		
BV	5,642,376	06/24/1997	Olbright et al.	372	45		
BW	5,727,013	03/10/1998	Botez et al.	372	96		
BX	5,774,487	06/30/1998	Morgan	372	45		

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Douglas A. White

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FORM PTO-1449

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1100.1114101 (H16-26549)

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09/751,423

LIST OF PATENTS AND PUBLICATIONS FOR
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DISCLOSURE STATEMENT

Applicant: Robert A. Morgan et al.

Filing Date

December 29, 2000

Group Art:

2872

FOREIGN PATENT DOCUMENTS

		Document No.	Date	Country	Class	Sub Class	Translation Yes No
<i>See</i>	AA	DE 4 240 706 A	06/09/1994	Germany			
	AB	EP 0 288 184 A	10/26/1988	Europe			
	AC	EP 0 776 076 A	05/28/1997	Europe			
	AD	JP 60-123084 A	07/01/1985	Japan			Yes (Abstract only)
	AE	JP 02-054981 A	02/23/1990	Japan			Yes (Abstract only)

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

	AF	Guenther et al., "Reliability of Proton-Implanted VCSELs for Data Communications", Invited paper, SPIE, Vol. 2683, OE LASE 96; Photonics West: Fabrication, Testing and Reliability of Semiconductor Lasers, (SPIE, Bellingham, WA 1996).
	AG	Hibbs-Brenner et al., "Performance, Uniformity and Yield of 850nm VCSELs Deposited by MOVPE", IEEE Phot. Tech. Lett., Vol. 8, No. 1, pp. 7-9, January 1996.
	AH	Hornak et al., "Low-Temperature (10K-300K) Characterization of MOVPE-Grown Vertical-Cavity Surface-Emitting Lasers", Photon. Tech. Lett., Vol. 7, No. 10, pp. 1110-1112, October 1995.
	AI	Huffaker et al., "Lasing Characteristics of Low Threshold Microcavity Layers Using Half-Wave Spacer Layers and Lateral Index Confinement", Appl. Phys. Lett., Vol. 66, No. 14, pp. 1723-1725, April 3, 1995.
<i>✓</i>	AJ	K.L. Lear et al., "Selectively Oxidized Vertical Cavity Surface-Emitting Lasers with 50% Power Conversion Efficiency", Elec. Lett., Vol. 31, No. 3 pp. 208-209, February 2, 1995.
	AK	Lehman et al., "High Frequency Modulation Characteristics of Hybrid Dielectric/AlGaAs Mirror Singlemode VCSELs", Electronic Letters, vol. 31, No. 15, July 20, 1995, pp. 1251-1252.
	AL	Magnusson, "Integration of Guided-Mode Resonance Filters and VCSELs", Electro-Optics Research Center, Department of Electrical Engineering, University of Texas at Arlington, May 6, 1997.
<i>0</i>	AM	Morgan et al., "Hybrid Dielectric/AlGaAs Mirror Spatially-Filtered Vertical Top-Surface Emitting Laser", Appl. Phys. Lett., Vol. 60, No. 8, pp. 921-923, February 24, 1992.
	AN	Morgan et al., "One Watt Vertical Cavity Surface Emitting Laser", Electron. Lett., Vol. 29, No. 2, pp. 206-207, January 21, 1993

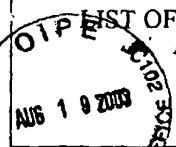
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Douglas W. Little

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FORM PTO-1449	Atty. Docket No.: 1100.1114101 (H16-26549)	Serial No.: 09/751,423
 LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT	Applicant: Robert A. Morgan et al.	
	Filing Date	Group Art:
	December 29, 2000	2872

AO	Morgan et al., "Producible GaAs-based MOVPE-Grown Vertical-Cavity Top-Surface Emitting Lasers with Record Performance", <u>Elec. Lett.</u> , Vol. 31, No. 6, pp. 462-464, March 16, 1995.
AP	Morgan et al., "Spatial-Filtered Vertical-Cavity Top Surface-Emitting Lasers", <u>CLEO</u> , 1993, pp. 138-139.
AQ	Morgan et al., "Vertical Cavity Surface Emitting Laser Arrays: Come of Age," , Invited paper, <u>SPIE</u> , Vol. 2683-04, OE LASE 96; Photonics West: Frabrication, Testing and Reliability of Semiconductor Lasers, (SPIE< Bellingham, WA, 1996).
AR	S.S. Wang and R. Magnusson, "Multilayer Waveguide-Grating Filters", <u>Appl. Opt.</u> , Vol. 34, No. 14, pp. 2414-20, 1995.
AS	S.S. Wang and R. Magnusson, "Theory and Applications of Guided-Mode Resonance Filters", <u>Appl. Opt.</u> , Vol. 32, No. 14, pp. 2606-13, 1993.
AT	Schubert, "Resonant Cavity Light-Emitting Diode", <u>Appl. Phys. Lett.</u> , Vol. 60, No. 8, pp. 921-923, February 24, 1992.
AU	Y. M. Yang et al., "Ultralow Threshold Current Vertical Cavity Surface Emitting Lasers Obtained with Selective Oxidation", <u>Elect. Lett.</u> , Vol. 31, No. 11, pp. 886-888, May 25, 1995.
AV	Yablonovitch et al., "Photonic Bandgap Structures", <u>J. Opt. Soc. Am. B.</u> , Vol. 10, No. 2, pp. 283-295, February 1993.
AW	Young et al., "Enhanced Performance of Offset-Gain High Barrier Vertical-Cavity Surface-Emitting Lasers", <u>IEEE J. Quantum Electron.</u> , Vol. 29, No. 6, pp. 2013-2022, June 1993.
AX	Smith, R.E. et al., "Polarization-Sensitive Subwavelength Antireflection Surfaces on a Semiconductor for 975 NM, <u>Optics Letters</u> , Vol. 21, No. 15, August 1, 1996, pp. 1201-1203.
AY	Suning Tang et al., "Design Limitations of Highly Parallel Free-Space Optical Interconnects Based on Arrays of Vertical Cavity Surface-Emitting Laser Diodes, Microlenses, and Photodetectors", <u>Journal of Lightwave Technology</u> , Vol. 12, No. 11, November 1, 1994, pp. 1971-1975.
AZ	Cox, J. A., et al., "Guided Mode Grating Resonant Filters for VCSEL Applications", <u>Proceedings of the SPIE</u> , The International Society for Optical Engineering, Diffractive and Holographic Device Technologies and Applications V, San Jose, California, January 28-29, 1998, Vol. 3291, pages 70-71.
BA	Martinsson et al., "Transverse Mode Selection in Large-Area Oxide-Confined Vertical-Cavity Surface-Emitting Lasers Using a Shallow Surface Relief", <u>IEEE Photon. Technol. Lett.</u> , 11(12), 1536-1538 (1999).

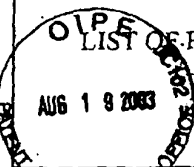
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<i>W</i>	CM	Jewell et al., "Surface-Emitting Microlasers for Photonic Switching and Interchip Connections", <u>Optical Engineering</u> , Vol. 29, No. 3, March 1990, pp. 210-214.
<i>o</i>	CN	Kishino et al., "Resonant Cavity-Enhanced (RCE) Photodetectors", <u>IEEE Journal of Quantum Electronics</u> , Vol. 27, No. 8, pp. 2025-2034.
<i>o</i>	CO	Kuchibhotla et al., "Low-Voltage High Gain Resonant Cavity Avalanche Photodiode", <u>IEEE Photonics Technology Letters</u> , Vol. 3, No. 4, pp. 354-356.
<i>o</i>	CP	Lai et al., "Design of a Tunable GaAs/AlGaAs Multiple-Quantum-Well Resonant Cavity Photodetector", <u>IEEE Journal of Quantum Electronics</u> , Vol. 30, No. 1, pp. 108-114.
<i>o</i>	CQ	Lee et al., "Top-Surface Emitting GaAs Four-Quantum-Well Lasers Emitting at 0.85 um", <u>Electronics Letters</u> , Vol. 24, No. 11, May 24, 1990, pp. 710-711.
<i>o</i>	CR	Lehman et al., "High Frequency Modulation Characteristics of Hybrid Dielectric/AlGaAs Mirror Singlemode VCSELs", <u>Electronic Letters</u> , vol. 31, No. 15, July 20, 1995, pp. 1251-1252.
<i>o</i>	CS	Miller et al., "Optical Bistability Due to Increasing Absorption", <u>Optics Letters</u> , Vol. 9, No. 5, May 1984, pp. 162-164.
<i>o</i>	CT	Morgan et al., "200 C, 96-nm Wavelength Range, Continuous-Wave Lasing from Unbonded GaAs MOVPE-Grown Vertical Cavity Surface-Emitting Lasers", <u>IEEE Photonics Technology Letters</u> , Vol. 7, No. 5, May 1995, pp. 441-443.
<i>o</i>	CU	Jiang et al., "High-Frequency Polarization Self-Modulation in Vertical-Cavity Surface-Emitting Lasers", <u>Appl. Phys. Letters</u> , Vol. 63, No. 26, December 27, 1993, pp. 2545-2547.
<i>o</i>	CV	Morgan et al., "High-Power Coherently Coupled 8x8 Vertical Cavity Surface Emitting Laser Array", <u>Appl. Phys. Letters</u> , Vol 61, No. 10, September 7, 1992, pp. 1160-1162.
<i>o</i>	CW	Morgan et al., "Hybrid Dielectric/AlGaAs Mirror Spatially Filtered Vertical Cavity Top-Surface Emitting Laser", <u>Appl. Phys. Letters</u> , Vol. 66, No. 10, March 6, 1995, pp. 1157-1159.
<i>o</i>	CX	Morgan et al., "Novel Hybrid-DBR Single-Mode Controlled GaAs Top-Emitting VCSEL with Record Low Voltage", 2 pages, dated prior to December 29, 2000.
<i>o</i>	CY	Morgan et al., "Progress and Properties of High-Power Coherent Vertical Cavity Surface Emitting Laser Arrays", <u>SPIE</u> , Vol. 1850, January 1993, pp. 100-108.
<i>o</i>	CZ	Morgan et al., "Progress in Planarized Vertical Cavity Surface Emitting Laser Devices and Arrays", <u>SPIE</u> , Vol. 1562, July 1991, pp. 149-159.
<i>o</i>	DA	Morgan et al., "Submilliamp, Low-Resistance, Continuous-Wave, Single-Mode GaAs Planar Vertical-Cavity Surface Emitting Lasers", Honeywell Technology Center, June 6, 1995.

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Longtin A. 11/16

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Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
BY	5,778,018	07/07/1998	Yoshikawa et al.	372	45	
BZ	5,818,066	10/06/1998	Duboz	257	21	
CA	5,903,590	05/11/1999	Hadley et al.	372	96	
CB	5,940,422	08/17/1999	Johnson	372	45	
CC	5,978,401	11/02/1999	Morgan	372	50	
CD	6,055,262	04/25/2000	Cox et al.	372	96	

FOREIGN PATENT DOCUMENTS

Document No.	Date	Country	Class	Sub Class	Translation Yes No
CE JP 5-299779	11/12/1993	Japan			Yes

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

CF	Banwell et al., "VCSE Laser Transmitters for Parallel Data Links", <u>IEEE Journal of Quantum Electronics</u> , Vol. 29, No. 2, February 1993, pp. 635-644.
CG	Catchmark et al., "High Temperature CW Operation of Vertical Cavity Top Surface-Emitting Lasers", <u>CLEO 1993</u> , p. 138.
CH	Chemla et al., "Nonlinear Optical Properties of Semiconductor Quantum Wells", <u>Optical Nonlinearities and Instabilities in Semiconductors</u> , Academic Press, Inc., Copyright 1988, pp. 83-120.
CI	Choa et al., "High-Speed Modulation of Vertical-Cavity Surface-Emitting Lasers", <u>IEEE Photonics Technology Letter</u> , Vol. 3, No. 8, August 1991, pp. 697-699.
CJ	G. G. Ortiz, et al., "Monolithic Integration of In0.2 Ga0.8As Vertical Cavity Surface-Emitting Lasers with Resonance-Enhanced Quantum Well Photodetectors", <u>Electronics Letters</u> , Vol. 32, No. 13, June 20, 1996, pp. 1205-1207.
CK	Graf, Rudolph, <u>Modern Dictionary of Electronics</u> , 6 th ed., Indiana: Howard W. Sams & Company, 1984, p. 694.
CL	Jewell et al., "Surface Emitting Microlasers for Photonic Switching & Intership Connections", <u>Optical Engineering</u> , Vol. 29, No. 3, pp. 210-214, March 1990.

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DB	Morgan et al., "Transverse Mode Control of Vertical-Cavity Top-Surface Emitting Lasers", <u>IEEE Photonics Technology Letters</u> , Vol. 4, No. 4, April 1993, pp. 374-377.
DC	Morgan et al., "Vertical Cavity Surface Emitting Laser Arrays: Come of Age," , Invited paper, <u>SPIE</u> , Vol. 2683-04, OE LASE 96; Photonics West: Frabrication, Testing and Reliability of Semiconductor Lasers, (SPIE< Bellingham, WA, 1996).
DD	Morgan et al., "Vertical-Cavity Surface-Emitting Laser Arrays" <u>SPIE</u> , Vol. 2398, February 1995, pp. 65-93.
DE	Morgan, "High-Performance, Producible Vertical Cavity Lasers for Optical Interconnects", <u>High Speed Electronics and Systems</u> , Vol. 5, No. 4, December 1994, pp. 65-95.
DF	Morgan, "Transverse Mode Control of Vertical-Cavity Top-Surface Emitting Lasers", <u>IEEE Phot. Tech. Lett.</u> , Vol. 4, No. 4., p. 374, April 1993.
DG	Nugent et al., "Self-Pulsations in Vertical-Cavity Surface-Emitting Lasers", <u>Electronic Letters</u> , Vol. 31, No. 1, January 5, 1995, pp. 43-44.
DH	U.S. Patent Application Serial No. 09/751,422, filed December 29, 2000, entitled "Resonant Reflector for Use with Optoelectronic Devices".

EXAMINER:

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EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.